Washington State Department of Health

April 2002

ENVIRONMENTAL HEALTH Fact Sheet

Cenex Supply & Marketing Facility – Quincy, WA

Health Assessment Findings

Health Assessment Completed

The Washington State Department of Health (DOH) has completed a health assessment of the Cenex hazardous waste site (site), located in Quincy, Washington. The health assessment evaluated potential exposures to contaminants in soil, soil gas, dust, groundwater, and indoor air to determine if any of these exposures posed a health risk to Quincy residents. DOH also evaluated whether cancer rates reported for the Quincy area were higher than those reported in other areas of the state.

Site Background

The Cenex site is located in a mixed residential and industrial area in the north part of Quincy, south of the Burlington Northern railroad tracks, and north of Division Street, between 4th and 6th Avenues. The site was used for many years to store and distribute liquid fumigants, pesticides, and herbicides. Routine handling of herbicides, pesticides, and operation of a pesticide rinsate collection system resulted in soil contamination at the site. An undocumented liquid fumigant spill in the early 1980s also resulted in soil and groundwater contamination.

Contaminants of Concern

Contaminants of concern in soil include chlorpyrifos (insecticide), disulfoton (insecticide), atrazine (herbicide), alachlor (herbicide), ethalfluralin (herbicide), trifluralin (herbicide), vernolate (herbicide) chromium (metal), beryllium (metal), thallium (metal) and cadmium (metal).

The primary contaminants of concern in the groundwater are 1,2-dichloropropane (1,2-DCP), other volatile organic compounds (VOCs), and nitrate. Since groundwater is not used as a source of domestic (i.e., drinking or cooking) water, this route of exposure was not evaluated in the health assessment.

Air Sampling

Because of community and agency concerns about the contaminated groundwater's potential impact on indoor air quality at the Quincy High School, Cenex conducted air sampling there in 1998. The sampling revealed a low level of 1,2-DCP in the teacher's lounge. More comprehensive air sampling was conducted inside the high school during summer 2000 and winter 2001. The results of the 2000 air sampling investigation were evaluated by ATSDR in a separate health consultation. The results of the 2001 air sampling investigation are being evaluated by DOH.

Current Site Conditions

In the mid to late 1990s, the fumigant storage tanks, rinsate collection pond, and most of the contaminated soil were removed from the site. Most of the remaining contamination is in the shallow groundwater, where exposures are not occurring. Ecology and Cenex have entered into an agreement to perform cleanup at the site to treat groundwater and remove soil vapors. Exposure to off-site property contaminated groundwater will be controlled by various means with the property owners. Groundwater monitoring will continue, and a compliance monitoring plan is in place to assure performance of the cleanup actions.

Conclusions

1. Current conditions at the Cenex site do not pose a health hazard.

2. Past conditions on the Cenex site property posed a low risk of developing cancer for people exposed over many years, through ingestion and skin contact, to some contaminants detected in soil.

3. Possible exposures to contaminants in dust from the Cenex site were evaluated, and were determined not to pose a health hazard.

4. Health risks to persons who may have been exposed to overspray from the former rinsate pond spray system could not be evaluated, since no sampling of the overspray was conducted during the system's brief operation. Based upon the small number of contaminants reported from a single pond sample, and the short timeframe during which exposures would have occurred, a long-term health risk is not expected.

5. The contaminated groundwater plume does not represent a public health hazard, since the groundwater is not being used for domestic purposes (i.e., drinking and cooking).

6. Indoor air sampling at the Quincy High School in 1998 and 2000 found only low levels of chemicals that were below levels of health concern. DOH is evaluating the results of further indoor air sampling conducted at the high school in November 2001.

7. The number of cancer cases reported for Quincy between 1992 and 1998 (the most recent reporting period) is no different than other, similar communities in Washington State.

Recommendations

1. Cenex should continue to monitor and clean up the site per Ecology requirements.

2. DOH should be notified if groundwater conditions change that could increase the threat to drinking water supplies, or to indoor air quality at the adjacent schools

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